

## PROCESS DEVICE WITH SWITCHING POWER SUPPLY

### ABSTRACT

A process field device for coupling to a two wire process control loop includes a field device  
5 circuitry and a switching regulator to power the  
circuitry. A series regulator provides a regulated  
supply voltage to the switching regulator. A noise  
filter reduces the amount of noise from the switching  
regulator which enters the two wire process control  
10 loop.